

(i) 1,000 feet of any building used as a dwelling, public building, school, church, or community or institutional building outside the permit area; or

(ii) 500 feet of an active or abandoned underground mine.

(2) The blast design may be presented as part of a permit application or at a time, before the blast, approved by the regulatory authority.

(3) The blast design shall contain sketches of the drill patterns, delay periods, and decking and shall indicate the type and amount of explosives to be used, critical dimensions, and the location and general description of structures to be protected, as well as a discussion of design factors to be used, which protect the public and meet the applicable airblast, flyrock, and ground-vibration standards in § 816.67.

(4) The blast design shall be prepared and signed by a certified blaster.

(5) The regulatory authority may require changes to the design submitted.

[48 FR 9492, Mar. 4, 1983, and 48 FR 9806, Mar. 8, 1983, as amended at 51 FR 19461, May 29, 1986]

§ 816.62 Use of explosives: Preblasting survey.

(a) At least 30 days before initiation of blasting, the operator shall notify, in writing, all residents or owners of dwellings or other structures located within ½ mile of the permit area how to request a preblasting survey.

(b) A resident or owner of a dwelling or structure within ½ mile of any part of the permit area may request a preblasting survey. This request shall be made, in writing, directly to the operator or to the regulatory authority, who shall promptly notify the operator. The operator shall promptly conduct a preblasting survey of the dwelling or structure and promptly prepare a written report of the survey. An updated survey of any additions, modifications, or renovations shall be performed by the operator if requested by the resident or owner.

(c) The operator shall determine the condition of the dwelling or structure and shall document any preblasting damage and other physical factors that could reasonably be affected by the blasting. Structures such as pipelines, cables, transmission lines, and cis-

terns, wells, and other water systems warrant special attention; however, the assessment of these structures may be limited to surface conditions and other readily available data.

(d) The written report of the survey shall be signed by the person who conducted the survey. Copies of the report shall be promptly provided to the regulatory authority and to the person requesting the survey. If the person requesting the survey disagrees with the contents and/or recommendations contained therein, he or she may submit to both the operator and the regulatory authority a detailed description of the specific areas of disagreement.

(e) Any surveys requested more than 10 days before the planned initiation of blasting shall be completed by the operator before the initiation of blasting.

[48 FR 9807, Mar. 8, 1983]

§ 816.64 Use of explosives: Blasting schedule.

(a) *General requirements.* (1) The operator shall conduct blasting operations at times approved by the regulatory authority and announced in the blasting schedule. The regulatory authority may limit the area covered, timing, and sequence of blasting as listed in the schedule, if such limitations are necessary and reasonable in order to protect the public health and safety or welfare.

(2) All blasting shall be conducted between sunrise and sunset, unless nighttime blasting is approved by the regulatory authority based upon a showing by the operator that the public will be protected from adverse noise and other impacts. The regulatory authority may specify more restrictive time periods for blasting.

(3) Unscheduled blasts may be conducted only where public or operator health and safety so require and for emergency blasting actions. When an operator conducts an unscheduled blast, the operator, using audible signals, shall notify residents within ½ mile of the blasting site and document the reason for the unscheduled blast in accordance with § 816.68(p).

§ 816.66

(b) *Blasting schedule publication and distribution.* (1) The operator shall publish the blasting schedule in a newspaper of general circulation in the locality of the blasting site at least 10 days, but not more than 30 days, before beginning a blasting program.

(2) The operator shall distribute copies of the schedule to local governments and public utilities and to each local residence within ½ mile of the proposed blasting site described in the schedule.

(3) The operator shall republish and redistribute the schedule at least every 12 months and revise and republish the schedule at least 10 days, but not more than 30 days, before blasting whenever the area covered by the schedule changes or actual time periods for blasting significantly differ from the prior announcement.

(c) *Blasting schedule contents.* The blasting schedule shall contain, at a minimum—

(1) Name, address, and telephone number of operator;

(2) Identification of the specific areas in which blasting will take place;

(3) Dates and time periods when explosives are to be detonated;

(4) Methods to be used to control access to the blasting area; and

(5) Type and patterns of audible warning and all-clear signals to be used before and after blasting.

[48 FR 9807, Mar. 8, 1983]

§ 816.66 Use of explosives: Blasting signs, warnings, and access control.

(a) *Blasting signs.* Blasting signs shall meet the specifications of § 816.11. The operator shall—

(1) Conspicuously place signs reading “Blasting Area” along the edge of any blasting area that comes within 100 feet of any public road right-of-way, and at the point where any other road provides access to the blasting area; and

(2) At all entrances to the permit area from public roads or highways, place conspicuous signs which state “Warning! Explosives in Use,” which clearly list and describe the meaning of the audible blast warning and all-clear signals that are in use, and which explain the marking of blasting areas and

30 CFR Ch. VII (7–1–12 Edition)

charged holes awaiting firing within the permit area.

(b) *Warnings.* Warning and all-clear signals of different character or pattern that are audible within a range of ½ mile from the point of the blast shall be given. Each person within the permit area and each person who resides or regularly works within ½ mile of the permit area shall be notified of the meaning of the signals in the blasting schedule.

(c) *Access control.* Access within the blasting area shall be controlled to prevent presence of livestock or unauthorized persons during blasting and until an authorized representative of the operator has reasonably determined that—

(1) No unusual hazards, such as imminent slides or undetonated charges, exist; and

(2) Access to and travel within the blasting area can be safely resumed.

[48 FR 9807, Mar. 8, 1983]

§ 816.67 Use of explosives: Control of adverse effects.

(a) *General requirements.* Blasting shall be conducted to prevent injury to persons, damage to public or private property outside the permit area, adverse impacts on any underground mine, and change in the course, channel, or availability of surface or ground water outside the permit area.

(b) *Airblast—(1) Limits.* (i) Airblast shall not exceed the maximum limits listed below at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area, except as provided in paragraph (e) of this section.

Lower frequency limit of measuring system, in Hz (±3 dB)	Maximum level, in dB
0.1 Hz or lower—flat response ¹	134 peak.
2 Hz or lower—flat response	133 peak.
6 Hz or lower—flat response	129 peak.
C-weighted—slow response ¹	105 peak dBC.

¹ Only when approved by the regulatory authority.

(ii) If necessary to prevent damage, the regulatory authority shall specify lower maximum allowable airblast levels than those of paragraph (b)(1)(i) of this section for use in the vicinity of a specific blasting operation.